# UNITED STATES DEPARTMENT OF COMMERCE Bureau of the Census

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## MASTER FILE

January 16, 2001

DSSD CENSUS 2000 PROCEDURES AND OPERATIONS MEMORANDUM SERIES W4

MEMORANDUM FOR Ruth Ann Killion

Chief, Planning, Research and Evaluation Division

From: Howard Hogan

Chief, Decennial Statistical Studies Division

Subject: Study Plan for the Operational Analysis of Field Verification for

Non-ID Housing Units, H-2

Attached is the study plan for the Operational Analysis of the Field Verification for Non-ID Housing Units, H-2. The Census 2000 Evaluation Program quality assurance process was applied to the methodology development and the study plan review process. The study plan is sound and appropriate for completeness and accuracy, and it answers its intended category questions as appropriate.

If you have questions about this study plan, please contact Michael Tenebaum on 457-4410.

#### Attachment

cc: Evaluations Executive Steering Committee

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# CENSUS 2000 OPERATIONAL SUMMARY Study #H.2

#### I. NAME OF OPERATION

Operational Analysis of Field Verification Operation For Non-ID Housing Units.

## II. PROJECT MANAGER

Mike Tenebaum (DSSD) 457-4410 Michael.C.Tenebaum@ccmail.census.gov.

## III. BACKGROUND

During field verification, enumerators visit the location of potentially missed housing units and verify their existence on the ground before they are added to the Master Address File (MAF).

#### A. Past Censuses and Tests

The 1990 Census did not have an operation that was equivalent to Field Verification, primarily because the Census Bureau relied on an elaborate series of clerical processes and the United States Postal Service (USPS) to verify that an address was valid before adding it to the census files. Forms generated by such operations as the Where You Counted campaign and Whole Household Usual Residence Elsewhere Forms were processed through a clerical search/match procedure, the first step of which was to geocode the address to a census block. If an addresses could not be geocoded, no further processing was done on the case. If the address was geocoded, a clerical Address Control File (ACF) browse was performed to see if the address was on the ACF. If the exact address was geocoded but not found on the ACF, the address was sent to the USPS to check if the address was correct and deliverable. Once it was verified as valid by the USPS, the process of searching the ACF was repeated, in case there were changes made to either the address by the USPS or to the ACF. If the address was still not found on the ACF, the address was added and the search form sent to the next stage of processing. Approximately 35,000 housing units were added to the ACF as a result of the Search/Match operation.

Starting with the 1995 Test Census, the Census Bureau recognized that it could potentially receive a large number of respondent-generated records without ID numbers, for example, Be Counted Forms and Telephone Questionnaire Assistance records. The intent was to rely on a computerized system to geocode and match these records to the

MAF. It was apparent that many of these Non-ID records could be geocoded to a census block but not match to an address already in the MAF. The 1990 Census of Population and Housing History indicates that the use of the USPS to verify the existence of addresses was not fully successful in the 1990 census. Thus the planning for Census 2000 includes a structured Field Verification program in which enumerators verify the existence of potential adds in the field before the record was added to the MAF. The field verification program was implemented for the 1995 Census Test, the 1996 Census Test and the 1998 Dress Rehearsal. While there are some data available from these tests, there were no formal evaluations and the data is somewhat questionable because of the overall lack of tight control over the operations.

#### B. Census 2000

For Census 2000 the addresses from Non-ID questionnaires<sup>1</sup> that were geocoded to a census block but did not match to an address already in the MAF were assigned for field verification by an enumerator. The enumerator visited the location of the address and determined if the address was valid. Those Non-ID addresses which were determined to represent valid housing units during field verification were then added to the MAF.

The procedures and materials used for field verification for Census 2000 were similar to those used in the 1998 Census Dress Rehearsal.

## IV. QUESTIONS TO BE ANSWERED AND METHODOLOGY

The data for this operational analysis will be accessed through the Management Information System (MIS) Cost and Progress Reports based on the requirements in a February 14, 2000 memorandum from Miskura to Longini, LoPresti and Marx titled "Cost and Progress Rquirements for Non-MAF ID'd Processing" and from variables on the Decennial Master Address File (DMAF). This operational analysis will attempt to answer the following questions.

1. How many geocoded Non-ID addresses were assigned for field verification by Type of Enumeration Area (TEA), Regional Census Center (RCC), state and Local Census Office (LCO)? By type of address? By source?

<sup>&</sup>lt;sup>1</sup>Non-ID questionnaires refer to those which are respondent generated or which the enumerator is not able to verify that the address exists.

## a. Methodology

This information will be obtained from the MIS cost and progress reports. The counts will be based on information provided to the MIS by the Geography Division (GEO) and the Decennial Systems and Contracts Management Office (DSCMO) after geocoding and matching.

#### b. Limitations

This data is dependent upon the accuracy of the record keeping and tallies provided to the MIS by GEO and DSCMO.

## c. Processing Requirements

We will create SAS summaries from the cost and progress reports.

- 2. What were the results of the field verification, that is, how many units were added to the MAF after verification, by TEA, RCC, State and LCO, and by type of address? By source?
  - a. Methodology

This data will be obtained from the DMAF.

## b. Limitations

None identified at this time.

## c. Processing Requirements

We will compile the data by using DMAF variables such as LCO, State (ST), TEA, Unit Status (USTAT), Master Address File ID (MAFID), and other appropriate variables.

- 3. Were there operational problems the Census Bureau encountered during the implementation of the field verification?
  - a. Methodology

This qualitative information will be obtained from field observation reports, debriefings and focus groups, as well as other operational reports.

b. Limitations

This data is subject to the normal limitations of anecdotal information.

c. Processing Requirements

Not applicable.

- 4. What problems did the Census Bureau encounter during the processing stages for Non-ID addresses by TEA, RCC, State and LCO and by type of address? By source?
  - a. Methodology

This information will be summarized from observation reports and debriefings of appropriate staff.

b. Limitations

This data is subject to the normal limitations of anecdotal information.

c. Processing Requirements

Not applicable.

## V. LIMITATIONS

No global limitations are identified at this time.

## VI. MILESTONE SCHEDULE

Start Date	End Date
09/01/99	12/15/00
12/06/99	03/31/00
07/06/00	07/26/00
08/14/00	01/19/01
10/23/00	03/16/01
11/20/00	03/16/01
03/19/01	04/20/01
04/30/01	06/01/01
06/04/01	08/06/01
08/08/01	08/24/01
09/06/01	09/06/01
	09/01/99 12/06/99 07/06/00 08/14/00 10/23/00 11/20/00 03/19/01 04/30/01 06/04/01 08/08/01

## VII. COST INFORMATION

	FY '00	FY '01
Number of FTEs by Division	DSSD: 0.25	DSSD: 0.40
FTEs in Dollars (FTEs by \$150,000)	\$37,500	\$60,000
Contracts	None	None
Other	None	None

# VIII. RELATED STUDIES/OPERATIONS

Not applicable.

# IX. REFERENCES

1990 Census of Population and Housing History (issued 1995), U.S. Bureau of the Census.

Miskura, Susan (2000). Memorandum to Longini, LoPresti and Marx, "Cost and Progress Requirements For Non-MAF ID'd Processing," U.S. Bureau of the Census.